

July 1, 2021

Commonwealth of Massachusetts
Department of Environmental Protection
20 Riverside Drive
Lakeville, MA 02347

Attn: Mr. Mark Dakers, Section Chief
Re: Waste Options Nantucket, LLC
Co-Compost Facility Certification

Dear Mr. Dakers:

On behalf of our client, Waste Options Nantucket, LLC, we are submitting a Certification for the Operation of a Transfer Station form associated with proposed changes in the operation of the Co-Compost Facility. This Certification is being submitted based on discussions during the meeting held on June 3, 2021 with representatives of Waste Options and the Town of Nantucket. The proposed operational changes include:

- Discontinuation of biosolids in the co-composting process.
- The replacement of biosolids with chipped leaf & yard waste as an alternate nitrogen source.
- The installation of a debagger trommel screen in the Tipping Building to remove bags, non-recyclable and non-compostable materials from the MSW waste stream.
- The acceptance of biosolids in the Air Floor Building for bulking before being disposed of in the active landfill area.

Should you have any questions or comments concerning this Certification please do not hesitate to contact Nathan Widell, General Manager, CFO at (215) 595-4218 or me.

Thank you for your consideration in this matter.

Sincerely,

SITEC Engineering & Environmental Consultants, Inc.

Wichael Fred somoni

Michael Quatromoni

Senior Project Manager

cc: Nathan Widell, Waste Options Nantucket, LLC

Robert McNeil, Director, Nantucket Department of Public Works



### Massachusetts Department of Environmental Protection Bureau of Waste Prevention - Solid Waste Program

## Certification for the Operation of a Transfer Station

Pursuant to 310 CMR 19.035(2)(f)

Important: When completing this form on a computer, use only the Tab key to move your cursor not the Return key.





The purpose of this form is for the facility's Responsible Official\* to certify the operation of a transfer station complies with its permit and all other applicable requirements in 310 CMR 16.00: Site Assignment Regulations for Solid Waste Facilities and 310 CMR 19.000 Solid Waste Management Facility Regulations.

#### INSTRUCTIONS

- 1. As a result of revisions to 310 CMR 19.000: Solid Waste Management Facility Regulations, effective February 14, 2014, the Responsible Official\* for the transfer station must submit this certification pursuant to 310 CMR 19.035(2)(f) for operation of a solid waste transfer station that has a valid permit issued prior to February 14, 2014 that is not a C&D Waste Transfer Station (defined as a transfer station permitted by MassDEP to accept 50 tons per day or more of construction and demolition waste).
- This certification form must be submitted by February 15, 2015. This certification is valid for a period of 5 years from the date signed in Section G, unless a certification is otherwise submitted earlier as required in accordance with 310 CMR 19.035(2).
- Be sure to obtain the most recent version of this form, available online at: http://www.mass.gov/eea/agencies/massdep/recycle/solid/. All applicable sections of the submitted form must be completed

. Transfer Station Information			
Nantucket Co-Composting Facility			
Facility Name			
188 Madaket Road			
Address			
Nantucket	MA	02554	(508) 228-4283
City/Town	State	ZIP Code	Telephone Number
#303223		#39529	
Regulated Object Account Number		FMF Number	
• • • • • • • • • • • • • • • • • • •			
Responsible Official*			
Responsible Official*  *As defined in 310 CMR 19.006, a Responsible C			
Responsible Official*  *As defined in 310 CMR 19.006, a Responsible Corporation, limited liability company, partnership		orship or trust) which is	subject to 310 CMR 19.000."
*As defined in 310 CMR 19.006, a Responsible Corporation, limited liability company, partnership Nathan Widell		orship or trust) which is CFO, Genera	subject to 310 CMR 19.000." al Manager
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List all relevant solid waste permits, plans, approvals, orders or other enforcement actions issued to the facility by the Department that contain specific practices, procedures and other requirements in effect for the design, operation, maintenance or monitoring of the facility. Where applicable, provide the plan or issue date and transmittal number for each item. For enforcement actions, include the document number, effective date and status of implementation by the facility.

Approval of Suitability - Type I Appproval (Renewal) & Beneficial Use Determination, September 10, 2010.

Authorization to Operate a Lined Landfill, Nantucket Landfill Phase 3A, November 14, 2018.

Authorization to Operate a Lined Landfill, Phase 2B Permimeter Containment Berm, August 13, 2020.



## Massachusetts Department of Environmental Protection Bureau of Waste Prevention - Solid Waste Program

## Certification for the Operation of a Transfer Station Pursuant to 310 CMR 19.035(2)(f)

D. Changes in Operation From Permits, Plans & Approvals for MassDEP Review

Important: When completing this form on a computer, use only the Tab key to move your cursor – not the Return key.





docun Assigi Note:	and explain any changes or planned changes to the design, operation, maintenance or monitoring of the chents listed in Section C. All changes listed below must be in compliance with all applicable requirement ment Regulations for Solid Waste Facilities and 19.000 including, but not limited to, 310 CMR 19.035, This section is not applicable to transfer stations located at a landfill site. Any changes to the permits of the to the post-closure use permitting requirements at 19.033 or 19.034 (see 19.029(2) & (3)).	nts in 310 CMR 16.00: Site 19.038(2)(a)1-11, 19.043 and 19.207.
SEE	ATTACHED NARRATIVE	
-		
	ncial Assurance Mechanism the appropriate box and fill in the appropriate responses.	
Does the	facility maintain a Financial Assurance Mechanism (FAM) pursuant to 310 CMR 19.051?	⊠ YES □ NO
If yes:	Enter the amount of the current FAM:	\$1,183,000
	Enter the date (MM/DD/YYYY) of the last adjustment to the FAM amount:	12/14/2018

As a reminder, pursuant to 310 CMR 19.051(6), the estimate of the cost of closure and post-closure maintenance must be revised every year, and every second year shall be submitted to the Department.

#### F. Statement of Compliance

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Check the appropriate box to indicate whether the facility is in compliance or not in compliance

The transfer station is **IN COMPLIANCE** with the facility's operating permit, plans, approvals, orders and enforcement actions and all applicable requirements in 310 CMR 16.00: Site Assignment Regulations for Solid Waste Facilities and 19.000 including, but not limited to, 310 CMR 19.035, 19.038(2)(a)1-11, 19.043 and 19.207.

⊠ YE	s 🗆	NO
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no:	which compliance will be achieved.
The Co-Co	ompost Facility remains in compliance with the AOS-Type 1 and BUD approvals. Comprehensive Annual Facility Reports are filed with
the Depart	tment and inspections are performed by a MassDEP certified Third Party Inspector.

List and describe the incidences of non-compliance, describe how the transfer station will return to compliance and the date by



## Massachusetts Department of Environmental Protection Bureau of Waste Prevention - Solid Waste Program

Certification for the Operation of a Transfer Station
Pursuant to 310 CMR 19.035(2)(f)

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#### G. Certification

"I attest under the pains and penalties of perjury that:

- I am duly authorized to bind the entity (corporation, limited liability corporation, public entity, trust, partnership or sole proprietorship, etc.) which is subject to these regulations and that I am fully authorized to make this attestation on behalf of this entity;
- I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification statement;
- based on my inquiry of those individuals responsible for obtaining the information, the information contained in this submittal is to the best of my knowledge, true, accurate, and complete;
- the transfer station does not accept and is not permitted to accept more than 50 tons per day of C&D waste and shall maintain this status.
- I have accurately stated whether the transfer station is operating in compliance with its permit and all applicable requirements in 310 CMR 16.00: Site Assignment Regulations for Solid Waste Facilities and 19.000 including, but not limited to, 310 CMR 19.035, 19.038(2)(a)1-11, 19.043 and 19.207;
- I have accurately identified any and all violations of 310 CMR 16.00: Site Assignment Regulations for Solid Waste Facilities or 19.000 or the terms and conditions of any permits or other approvals issued thereunder by MassDEP;
- If the transfer station is not in compliance, I have stated what the owner and operator will do to return the transfer station to compliance and the date by which compliance will be achieved;
- plans and procedures to maintain compliance are in place at the transfer station and will be maintained even if processes or operating procedures are changed;
- all documents, plans and procedures related to the operation of the transfer station are available to MassDEP upon request; and
- 10. I am aware that there are significant penalties, including, but not limited to, possible administrative and civil penalties, fines and imprisonment, for submitting false, inaccurate, or incomplete information."

Signature of Responsible Official

Nathan Widell, CFO, General Manager

Print Name of Responsible Official

06/28/2021

Date (MM/DD/YYYY)

# Waste Options Nantucket, LLC Co-Compost Facility Material Management & Operational Changes

#### 1.0 INTRODUCTION

Waste Options Nantucket, LLC conducts co-composting operations in accordance with an *Approval of Suitability (AOS)-Type I Approval (Renewal) & Beneficial Use Determination (BUD) - Compost Derived from Municipal Solid Waste permit,* issued by MassDEP on September 30, 2010. The Facility is designed to compost Municipal Solid Waste (MSW) with biosolids generated at the Nantucket-Surfside Wastewater Treatment Plant. The Facility is approved by the MassDEP to operate seven days per week and can accept a maximum of 100 tons per day of MSW and 10 tons per day of biosolids. The primary purpose of this Certification is to discontinue the use of biosolids as component of this co-composting operation as they are known to contain elevated concentrations of PFAS.

Materials are received in the Tipping Building and are unloaded. MSW and biosolids are then loaded onto a conveyor that feeds the anerobic digester at a predetermined ratio. The materials remain within digester for a period of approximately three (3) days. After leaving the digester, the rough compost is screened and formed into windrows within the Aeration Building.

The temperature of the compost material must be maintained at a minimum of 55° Celsius (131° Fahrenheit) for a period of 15 days to be considered suitable for removal from the Aeration Building and to proceed to the next stage. After leaving the Aeration Building, the compost is blended with chipped brush and leaf and yard waste. This blend is further composted outside in windrows for approximately six-months to create the final co-compost product. This final compost is sampled and analyzed for an extended listing of parameters in accordance with the Sampling and Analysis Plan included in the MassDEP, Approval of Suitability - Type I Approval.

In August 2020, MassDEP modified the Sampling and Analysis Plan requiring testing of the final compost for per and poly fluoroalkyl (PFAS) compounds. This testing is part of MassDEP's comprehensive strategy to address PFAS in residuals. Three quarterly sampling events have taken place and the results have been submitted to MassDEP. Low level PFAS compounds were detected in the final compost during each sampling event. The availability of this compost for public use had previously been discontinued and the blended material is stockpiled at a remote site location.

Waste Options Nantucket, LLC sampled the incoming biosolids to identify the probable source of the PFAS in the final compost in accordance with the Beneficial Use Determination (BUD) approved by MassDEP. The biosolids were determined to have high PFAS levels that likely influence the quality of the final compost.

#### 2.0 PROPOSED MATERIAL and OPERATIONAL CHANGES

#### **Digester Input Materials:**

The primary purpose of this Certification application is to eliminate the biosolids from the Nantucket Co-Compost and to replace it with an alternate nitrogen source, namely ordinary chipped leaf & yard waste, of which Waste Options Nantucket, LLC has an abundance. The source of the microbes needed for degradation through the digester are present substantially in the MSW. Waste Options is currently accepting approximately 50 tons of MSW per day. That rate is anticipated to rise to approximately 90 tons per day in July. The leaf & yard waste is dropped off by private citizens and small landscape contractors. It is then ground and screened and placed in windrows, readily available for use. During the initial startup of the operation, Waste Options will be evaluating and adjusting the amount of leaf & yard waste needed to optimize carbon-nitrogen levels and create a high-quality compost product that can be made available for public use.

#### **MSW Debagger Trommel Screen:**

Waste Options is also proposing to improve the quality of MSW before being placed in the digester with installation of a debagger trommel screen that will be positioned in the Tipping Building. It is anticipated that the trommel debagger will be successful in removing plastic bags, bottles, cans and other non-recyclable and non-compostable (NRNC) materials from the MSW, some of which likely contains PFAS. The finer material passing the screener will be fed into the digester along with the chipped leaf & yard waste. Residual material not passing through the debagger screener may be managed in one of two methods. They may be hauled to the transfer station, loaded-out with the NRNC from municipal collection and brought off island to Zero Waste in Rochester, MA for processing. Alternatively, if the residuals are more suited for disposal, they will be brought to the active Phase 3A landfill area for disposal.

#### **Biosolids Management:**

Biosolids will no longer be accepted within the Tipping Building. Instead, they will be unloaded inside the Air-Floor Building, which is equipped with an effective air handling and odor control system. The biosolids will be bulked with wood chips to facilitate handling and further reduce the moisture content. The bulked biosolids can be stored inside the Air-Floor Building until a sufficient quantity has accumulated for disposal. It is proposed that the biosolids be disposed of in the active lined landfill area in accordance with MassDEP regulation 310 CMR 19.061. An application for Presumptive Approval will be submitted to MassDEP prior to disposing of biosolids in the landfill in accordance with the regulation.

Biosolids are not delivered to the facility on a daily schedule. Averaged out, approximately 4 tons of biosolids are currently accepted per day. This average can go as high as 9 tons per day in July, the busiest season. The biosolids should have a moisture content no greater than 20% at the time of delivery to the facility. The bulking with the wood chips will further reduce the moisture to facilitate load-out, hauling and disposal at the landfill.

The biosolids disposed at a landfill will be incorporated into the active face of a landfill in a 3:1 mixture of solid waste residuals to biosolids or placed in a designated area and covered immediately.